

USE OF GENE PRODUCT OF ADENOVIRUS EARLY REGION 4 ORF-6  
TO INHIBIT REPAIR OF DOUBLE-STRAND BREAKS IN DNA

Abstract of the Disclosure

The present invention provides a modified adenovirus comprising genomic adenoviral DNA which has been modified so that (i) the only gene product of the early region (E4) that is expressed is open reading frame 6 (ORF-6), (ii) neither the gene product of the E1A region nor the gene product of the E1B region is expressed, and (iii) no other early or late gene products are expressed. The present invention also provides methods of inhibiting repair of breaks in double-stranded DNA in a cell, preventing concatamerization of linear wild-type adenoviral DNA, inhibiting V(D)J recombination of nucleic acid sequences encoding immunoglobulins, preventing apoptosis, and preventing and treating cancer.